

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111227 A2

(51) International Patent Classification⁷: C12N 9/90, C12P
41/00, C12Q 1/533, 1/34, C12N 15/61, 5/10, 15/63

(21) International Application Number:
PCT/EP2004/005239

(22) International Filing Date: 15 May 2004 (15.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
103 26 109.5 6 June 2003 (06.06.2003) DE
10 2004 022 065.4 5 May 2004 (05.05.2004) DE

(71) Applicant (for all designated States except US): DE-
GUSSA AG [DE/DE]; Bennigsenplatz 1, 40474 Düssel-
dorf (DE).

(72) Inventors; and

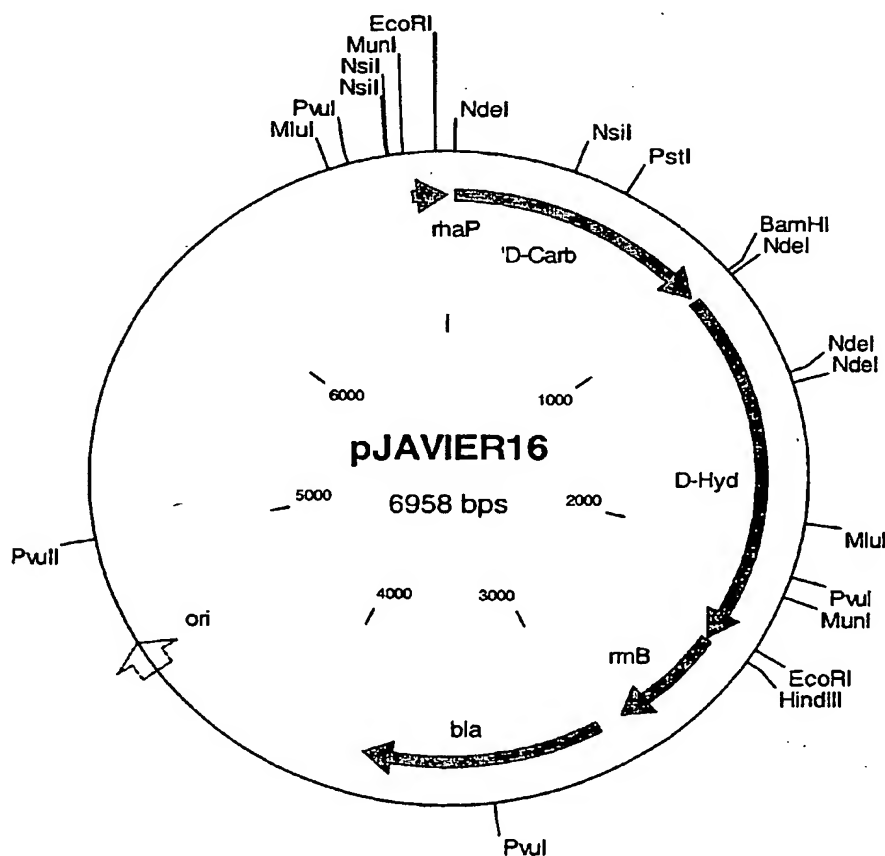
(75) Inventors/Applicants (for US only): MAY, Oliver
[DE/DE]; Am Rebenborn 17A, 60388 Frankfurt (DE).
DRAUZ, Karlheinz [DE/DE]; Zur Marienruhe 13, 63579
Freigericht (DE). BUCHHOLZ, Stefan [DE/DE]; Am
Wiesengrund 1, 63456 Hanau (DE).

(74) Common Representative: DEGUSSA AG; Intellectual
Property Management, Patente und Marken, Standort
Hanau, Postfach 13 45, 63403 Hanau (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: SCREENING PROCESS FOR HYDANTOIN RACEMASES



(57) Abstract: The present invention relates to a screening process for hydantoin racemases and to novel hydantoin racemases, to the nucleic acid sequences coding therefor and to a process for mutagenesis. Hydantoin racemases are of interest in connection with the production of enantiomerically enriched amino acids from racemic hydantoins.

WO 2004/111227 A2

BEST AVAILABLE COPY



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only